Saunders Street Bridge
Saunders Street, spanning Champlain Canal
Whitehall
Washington County
New York

HAER No. NY-184

PHOTOGRAPHS
WRITTEN HISTORICAL DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD

SAUNDERS STREET BRIDGE
HAER No. NY-184

Location: Saunders Street spanning the Champlain Canal, Town of Whitehall, Washington County, New York. Bridge is 1,000 feet south of Lock 12 and 500 feet east of Route 22.

UTM: N 4823480
E 629080
New York State Quad: Whitehall

Date of Construction: 1911

Style: Single span, through Baltimore steel truss bridge.

Engineer/ Builder: The Saunders Street Bridge was designed by the New York State Barge Canal bridge engineering department, under the supervision of W. R. Davis, Chief Bridge Designer and Inspector, and constructed as part of "Contract 15" of the enlargement and improvement of the Champlain Division of the New York State Barge Canal. Contract 15 ran from the junction of Lake Champlain with the Champlain Canal at Whitehall, 6.8 miles south to a point north of Comstock, New York. Contract 15 included excavating the canal prism and constructing Locks 11 and 12, dams 4 and 5, a spillway, two culverts, and five bridges with their piers, abutments, and approaches. Contract 15 was awarded to the Atlantic, Gulf and Pacific Company on August 9, 1906 and completed in April of 1912. The erection of the bridge was sub-contracted. There is some mystery as to the actual sub-contractor of the bridge. A partially removed plate on the east end of the bridge reads: [missing information] Contractors, Built by A. Cordon Murray and Michael Blake, Receivers of J. B. and J. M. Cornell Company, 1910." This plate indicates that the erection of the bridge superstructure was sub-contracted to the Cornell Co., but completed by Murray and Blake after Cornell went into bankruptcy receivership.

Present Owner: New York State.

Present Use and Condition: The deteriorated north corner of the west concrete pier has been replaced by steel columns. Significant loss of section in steel stringers resulted in bridge being temporarily closed for welding repairs during mid-1987. Bridge is currently posted for a ten ton load limit.

Significance: This bridge is significantly different from the original uniform bridge design proposed for Champlain Canal bridges in 1901, but representative of the steel truss bridges built in 1910-1911 to span the enlarged canal.

Materials of Construction: Main span uses steel Baltimore trusses. Both the upper and lower chords fabricated from riveted plates and angles. The verticals and diagonals are angles with riveted lacing bars. Plates with 24 inch webs are used as floorbeams. The floorbeams carry I-beam stringers spaced 2 feet 5 inches center to center. On both sides of the bridge, a concrete deck sidewalk is carried on the outside of the truss. Bridge has upper lateral "X" bracing formed from angles. The single approach span at the western end of main span is a simple concrete slab deck bridge.

Dimensions: The total length of the two span bridge, including the single concrete span at the western end, is 226 feet. The Baltimore truss main span is 175 feet long. The concrete slab approach span is 20 feet long. Total deck area is 6,700 square feet. The out-to-out width is 33 feet, six inches, the width between the centerline of the trusses is 19 feet 6 inches, and the curb-to-curb width is 16 feet, 10 inches. The bridge has two sidewalks with a concrete surface, each six feet wide. Each of the twelve truss panels measure 14 feet 4 inches by 28 feet. Bridge affords a horizontal clearance of approximately 100 feet and a 17 foot vertical clearance above the canal. Saunders Street has a vertical clearance of 15 feet 6 inches.

Significant Exterior Features: Steel fascia I beams on the approach span are marked "Carnegie, U.S.A." and "Jones & Laughlin." Main span has slightly ornamental steel handrails.

Major Alterations and Additions: Original concrete sub-deck and yellow pine deck have been replaced by an open grate steel deck.

Project
Information: The documentation of the Saunders Street Bridge was prepared by the Historic American Engineering Record (HAER), National Park Service, during the summer of 1987 for the New York State Historic Bridges Recording Project. This project was sponsored by the New York State Department of Transportation and under the supervision of Eric DeLony, Chief & Principal Architect, HAER. This report was written by Andrew Cole and Charles Scott. When citing this report, please credit the Historic American Engineering Record and the authors.

Steel for the Saunders Street bridge arrived in Whitehall in February 1911 and the existing bridge was dismantled and removed in April and May. During May, piles for carrying the pier were driven while concrete for the east bridge abutment was placed. By June, approximately two-thirds of the steel superstructure had been erected and bolted into place. At the end of July, the riveting of the bridge superstructure was complete, the falsework had been removed, and the bridge was being painted. Between August and October, excavation and placement of the concrete for the western abutment was completed. The single approach span at the western end of the bridge was constructed during October. The yellow pine decking of the bridge was nailed in place, the concrete sidewalks laid, pipe handrails installed, and approach road stone curbs set all during November. The bridge opened for service at the end of 1911.

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